

MAMEDOV, Shamhal; AVANESYAN, M.A.; ALIYEVA, B.M.

Glycol ethers and their derivatives. Part 66: Synthesis of alkoxyethyl  
ethers of furfuryl alcohol. Zhur. ob. khim. 34 no. 2:478-482 F '64.  
(MIRA 17:3)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

MAMEDOV, Shamkhal; DZHALILOV, T.N.; AVANESYAN, M.A.

Glycol ethers and their derivatives. Part 1. Synthesis of  
alkoxymethyl ethers of 1, 3-dimethyl-4,6-dioxydimethylbenzene.  
Zhur. ob. khim. 34 no. 5:1434-1438 May '64. (volum 17:7)

1. Institut neftekhimicheskikh protsessov AN AzSSR.

MAMEDOV, Shamkhal, POKONOVA, Yu.V.; AVANESYAN, M.A.

Glycol ethers and their derivatives, Part 79: Alkoxymethyl  
ethers of allyl monoether of ethylene glycol. Zhur. ob. khim.  
34 no.7 2182-2186 Jl '64 (MIRA 17:8)

1. Institut neftekhimicheskikh protsessov AN AzerbSSR.

MAMEDOV, Shamkhal; ALIYEVA, B.M.; AVANESYAN, M.A.

Glycol ethers and their derivatives. Part 82: Synthesis of  
alkoxymethyl ethers of alkylphenylcarbinols. Zhur. ob. khim.  
34 no.9:2877-2881 S '64. (MIRA 17:11)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

MAMEDOV, Shamkhal; ALIYEVA, Kh.M.; AVANESYAN, M.A.

Glycol ethers and their derivatives. Part 85: Synthesis of  
alkoxymethyl ethers of monohydric phenols. Zhur. ob. khim. 34  
no.10:3222-3227 O '64. (MIRA 17:11)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

MAMEDOV, Shamkhal; DZHAGUPOVA, Ye.G.; AVANESYAN, M.A.

Glycol ethers and their derivatives. Part 86: Synthesis of  
alkoxymethyl ethers of p-chlorobenzyl alcohol. Zhur. ob.  
khim. 34 no.11:3583-3588 N '64 (MIRA 18:1)

MAMEDOV, Shamkhal; DEHALILOV, T.N.; AVANESYAN, M.A.

Study of glycol ethers and their derivatives. Part 87: Alkoxyethyl alkyl xanthates. Zhur. b. khim. 34 no. 12:3907-3911 D '64  
(MIRA 18:1)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

L 52170-65	ENT(1)/ENA(3)/ENA(4)-2	Pa-h RO			
ACCESSION NR:	AP5CL5535		UR/0286/61/000/008/0080/0080		
AUTHORS:	Mamedov, Sh.; Mamadova, A. Kh. A.-X.; Avanerryan, M. A.; Osipov, O. V.; Zeynalova, V. N.; Karakhanova, S. V.				
TITLE:	A method for controlling weeds. Class 4, No. 170216				
SOURCE:	Byulleten' izobreteniy i tovarnykh znakov, no. 8, 1965, 80				
TOPIC TAGS:	agriculture, pesticide, ester				
ABSTRACT:	This Author Certificate presents a method for controlling weeds by herbicides. To broaden the assortment of herbicides, para- $\beta$ -cresoyl- $\beta$ -carbo-methoxyethyl ester is used for this purpose.				
ASSOCIATION:	none				
SUBMITTED:	31 Jul 64	ENCL:	00	SUB CODE:	00
NO REF SOV:	OCC	OTHER:	000		
<p style="text-align: center;">AM Card 1/1</p>					

MAMEDOV, Shamkhal; KAFAROVA, S.M.; RZAYEV, A.S.; AVANESYAN, M.A.

Glycol ethers and their derivatives. Azerb. khim. zhur. no.1:45-49  
'65. (MIRA 18:7)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

MAMEDOV, Shamkhal; DZHALILOV, T.; AVANESYAN, M.A.

Glycol ethers and their derivatives. Part 96: Synthesis of mixed di-alkoxydimethyl ethers of thiodiethylene glycol. Zhur. org. khim. 1 no.1:64-69 Ja '65. (MIRA 18:5)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

MAMEDOV, Shamkhal; BAGRAMOVA, A.I.; AVANESYAN, M.A.

Studies in the field of glycol ethers and their derivatives.  
Azerb. khim. zhur. no.3:33-36 '65. (MIRA 19:1)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

AVANESYAN, M.G.; PEOSKURINA, Ye.G.

Outstanding people of the seven-year plan. Tekst.prom. 20 no.9:53-  
56 S '60. (MIRA 13:10)

1. Nachal'nik ot dela tekhnicheskogo kontrolya Karabakhskogo shel-  
kovogo kombinata (for Avanesyan).  
(Nagorno-Karabakh Autonomous Province--Silk industry--Employees)  
(Barnaul--Cotton industry--Employees)

AVANESYAN, M.T.; IL'IN, V.D.; SOKOLOV-KOCHEGAROV, A.S.; YAKHO, A.V.

Boundary of the Cretaceous and Paleogene sediments in the  
southern part of the trans-Ungur trough (eastern Turkmenia).  
Dokl. AN SSSR 164 no. 1:155-157 S '65. (MERA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy  
neftyanoy institut. Submitted May 12, 1965.

AVANESYAN, S.B.

Violation of standards for the organization of mechanical drawing. Standartizatsiiia 27 no.4:55-56 Ap '63.

(MIRA 16:4)

(Mechanical drawing—Standards)

AVANESYAN, S. I.

36613. ISAMERYAN, P. P. i AVANESYAN, S. I. O Vozraste Metamorficheskikh Slantsev Severnogo Sklona Khrebeta Murguz (Armeniya). Izvestiya Akad. Nauk SSSR, Seriya Geol., 1949, No. 6, c. 215-16. - Bibliogr: 9 Nazv.

SO: Letopis' Zhurnal'ynkh Statey, Vol. 50, Moskva, 1949

SARKISYAN, A.M.; AVANESYAN, T.G.; MELKONYAN, V.A.; GAZAROV, A.T.

Preparation of slag for casting into stones. Patent U.S.S.R. 77,344, Dec.  
31, 1949.  
(CA 47 no.19:10196 '53)

1. AVANESYAN, T. G.
2. USSR (600)
4. Technology
7. Welding metals. Erevan, Izd-vo "Aippetrat", 1952
9. Monthly List of Russian Accessions, Library of Congress, February 1953, Unclassified.

Avanesyan, T. G.						
		<p>The crystal structures of elements forming negative ions      M. G. Avanesyan, in: Sbornik Nauch. Trudov, Erevan, Politekhnicheskii Institut 1956, No. 10, p. 10. The crystal structure of an element is considered as consisting of atoms in quantized energy states, with the exchange energy between various ionic species constituting the bonding force in the crystal. The ionic radius may be calcd. by the relation <math>r = 0.218</math>, where <math>a</math> is a lattice parameter. The several values of <math>r</math> obtained for nonradioactive crystals are averaged for comparison with experimentally detd. ionic radii; good agreement is shown for Li<sup>+</sup>, K<sup>+</sup>, Cs<sup>+</sup>, Rb<sup>+</sup>, Ba<sup>2+</sup>, Sr<sup>2+</sup>, Ca<sup>2+</sup> and Cl<sup>-</sup>. The formation of an allotropic modification results from changes in ionization states produced by external changes, such as in temp. and pressure.</p> <p style="text-align: right;">Robert F. Adansky</p> <p style="text-align: right;">JUN 15 1984 4E4j</p> <p style="text-align: center;"> <i>Kafedra Teknologii      metallov Yerevanskogo politekhnicheskogo      instituta.</i> </p>	15			

AVANESYAN, T.G.

E-2

Category : USSR/Solid State Physics - Solid State Theory. Geometric  
Crystallography

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 3663

Author : Avarasyan, T.G.

Title : On the Electron Density and Cohesion Energy of Aluminum

Orig Pub : Nauch. tr. Erevansk. politekhn. in-t, 1956, No 10, 9-13

Abstract : Starting with the ratio between the radius of the ion and the distance between ions, the author concludes that the lattice of the metallic aluminum consists of  $\text{Al}^{2+}$  ions at the vertices of the cube and of  $\text{Al}^{3+}$  at the centers of the faces. The computed average electron density is close to the value obtained experimentally (Referat. Zh. Fizika, 1955, 19247). The presence of ions having different energy states determines the electron transitions, which produce the bonds in the lattice. It is assumed that the energy difference of various ion states determines the cohesion energy  $W$  in the crystalline lattice according to the following equation:  $W = 33.4 Z_{\text{MAX}} / N \left( \frac{1}{a_2} - \frac{1}{a_1} \right) \text{ eV.}$

Card : 1/2

Category : USSR/Solid State Physics - Solid State Theory. Geometric  
Crystallography

E-2

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 3663

where  $Z_{\max}$  is the maximum valence, N the number of atoms in the elementary cell,  $a_1$  the maximum distance between ions (Angstrom), and  $a_2$  the nearest distance between ions (Angstrom). The calculated cohesion (sublimation) energies for many metals (but not for all) are in satisfactory agreement with the experimental data.

Card : 2/2

15-57-1-428

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1,  
p 67 (USSR)

AUTHOR: Avanesyan, T. G.

TITLE: The Structure and Bonding Energy of Diamond, Silica,  
Germanium, and Tin (O strukture i energii stsepleniya  
almaza, kremniya, germaniya i olova)

PERIODICAL: Sb. nauch. tr. Yerevansk. politekhn. in-t, 1956,  
Nr 13, pp 51-54.

ABSTRACT: The proper relationship in the crystalline lattice is  
 $r/a = 0.216$ , where  $r$  is the ionic radius and  $a$  is the  
interplanar distance. The energy of bonding in the  
crystalline lattice is calculated from the equation

$$w = \frac{7.22}{N} \left( \frac{1}{r_1} - \frac{1}{r_2} \right),$$

where  $r_1$  and  $r_2$  are the ionic radii in the different  
quantum states, determining the valence of the ions;  
 $z$  is the nuclear charge; and  $N$  is the number of ions

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15-57-1-428

The Structure and Bonding Energy of Diamond, Silica, (Cont.)

in the crystal lattice. Starting with these two relationships, the author calculates the ionic radii and the bonding energy for diamond, silica, germanium, and tin. The calculation for diamond shows that the electrons are simply bound with a pair of ions. This probably explains the great hardness and electrical resistance of diamond.

Good results were calculated for silica, germanium, and tin when  $z = 3$ . It is assumed that three electrons occur in the orbit of the negative ions of Si, Ge, and Sn, but that the positive ions are  $\text{Si}^{4+}$ ,  $\text{Ge}^{4+}$ , and  $\text{Sn}^{4+}$ . Thus, one electron remains free. This fact may explain metallic properties and the nature of electronic semi-conductivity. From the data obtained, the author concludes that semiconductors are crystals in which the lattice contains positive and negative ions with excess ("free") electrons. Consequently, by determining the parameters of the lattice by experimental means, one can calculate the ionic radius of elements, determine the degree of ionization, and compute the bonding energy in the crystal lattices.

Card 2/2

Ye. S. R.

L 43084-66 EWP(k)/EWP(m)/T/EWP(e)/EWP(v)/EWP(t)/ETI IJP(c) WH/WW/JD  
ACC NR: AR6014369 (A,N) SOURCE CODE: UR/0137/65/000/011/0032/C032

AUTHOR: Avanesyan, T. G.

4-22

TITLE: Theory of compression and sintering of multicomponent systems (iron carbide)

SOURCE: Ref. zh. Metallurgiya, Abs. 11G230

REF SOURCE: Sb. Poroshk. metallurgiya i metalloobrabotka. Yerevan, 1965, 196-204

TOPIC TAGS: powder metallurgy, ion theory, special relativity theory, spin wave theory

ABSTRACT: The theoretical basis for particle bonding in mono- and polycomponent systems is discussed from the point of view of relativistic mechanics. The nature of the bonds in the interior of powder particles and between individual particles is identical and depends on the interaction of the electrons with the atomic cores--ions. The interaction of spinor particles is governed by the asymmetry which determines the exchange between the excited and ground states. The binding energy of the outer electrons in He, Li, and the H<sub>2</sub> molecule was calculated on the basis of the mass-energy relation through the fine structure constant, taking into account the spin-orbit interaction between the individual states. The calculated results are in good agreement with experimental data. The system Fe-C was taken as an example of a multicomponent system. Assuming that C in alloys exists in the same state as in

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UDC: 621.762.4.001

L 43084-66

ACC NR. AR6014369

its own lattice, the binding energy of graphite, maximum concentration of C in austenite, and the radius of the C-3 ions were calculated with the aid of the derived equations. The value for the ionic radius is in good agreement with the value obtained by different methods; the binding energy of graphite corresponds to the sublimation energy of graphite. It follows that the theoretical foundations for the binding in mono- and multicomponent systems are identical and are connected with the spin-orbit interaction between relativistic particles comprising the system.

V. Kvin [Translation of abstracts]

SUB CODE: 11, 20

Card 2/2 ad

ABDURASHITOV, S.A.; AVANESYAN, V.G.

Experimental investigation of the physical properties of  
emulsion oils. Izv.vys.ucheb.zav.; neft' i gaz 7 no. 1:77-  
80 '64. (MIRA 17:7)

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova.

AVANESYAN, V.G.

Investigating the motion of petroleum emulsions through pipelines. Izv. vys. ucheb. zav.; neft' i gaz 7 no.8:105-109 '64.  
(MIRA 17:10)  
1. Azerbaydzhanskiy institut nefti i khimii imeni Azizbekova.

AVANESYAN, V.G.

Experimental investigation of the head loss in local resistances  
in the movement of emulsion petroleums through pipelines. Izv.  
vys. ucheb. zav.; neft' i gas 7 no.9:93-97 '64.  
(MIRA 17:12)  
1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.

AVANOV, B.S.; MOKROV, A.I.; MERECHENKOV, Yu.Y.

PSK-1 sliding welding bracket. Mash. i neft. obor. no. 1t41-43'64  
(MIRA 1727)

1. Zavod imeni Petrova, g. Volgograd.

AVANOV, B.S.; MOKROV, A.I.

Double-bracket machine for gas-oxygen cutting of shells.  
Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i  
tekh.inform. no.8:24-25 Ag '65.

(MIRA 18:12)

SHIPINOV, N.; AVANOV, G. (Leningrad)

Controlling weeds on streetcar tracks. Zhil.-komm.khoz. 9 no.8:17-18  
'59. (MIRA 12:11)  
(Weed control) (Leningrad--Street railways--Track)

AVANOV, V.A., inzh.; STRAKHOV, V.V., inzh.

Durability calculation of hoisting shafts of drilling winches.  
Vest. mash. 38 no. 6:5-11 Je '58. (MIRA 11:?)  
(Winches)

S/672/62/000/011/002/011  
D403/D307

AUTHORS: Shlyk, V. Ya., Avanova, A. I., Tumanova, Ye. S. and  
Semenov, S. S.

TITLE: Application of enriched shale as a filler in ebonite  
mixtures

SOURCE: Leningrad. Vsesoyuznyy nauchno-issledovatel'skiy institut  
pererabotki i ispol'zovaniya topliva. Trudy. no. 11,  
1962. Khimiya i tekhnologiya topliva i produktov yego  
pererabotki, 28-34.

TEXT: The present work was carried out in Laboratoriya khimiches-  
kikh produktov VNIIT (Laboratory of Chemical Products VNIIT) and  
Tsentral'naya laboratoriya zavoda rezino-tehnicheskikh izdeliy  
(RTI) Lensovnatkhoza (Central Laboratory of the Rubber Articles  
Factory of Lensovznarkhoz), using GOST methods for the testing of  
rubber. Mixtures based on (KC-30 and CKG (SKS-30 and SKB) rubbers  
and on reclaimed rubber were prepared, using shales enriched in  
kerogen as fillers; ebonite dust filler was also tried for compa-

Card 1/2

Application of enriched ...

S/672/62/000/011/002/011  
D403/D307

rison. A number of samples containing various proportions of filler were prepared and their physical and mechanical properties were determined. It was found that the kerogen filler degraded the strength properties of the products, but increased the hardness and heat resistance; the filler is also highly inert chemically. Kerogen-filled ebonites can be subjected to the usual technological processing. The authors express their gratitude to the Kafedra reziny im. B. V. Byzova, LTI im. Lensoveta (Rubber Department im. B. V. Byzov, LTI im. Lensoviet) for experimental facilities and consultations. There are 5 tables.

Card 2/2

AVANYAN, L. A.

"On New Methods of Preparing and Utilizing Various Nutrient Media,"  
a report given at the first republic scientific-practical conference of physician-  
bacteriologists of the Scientific-research Institute of Epidemiology, Microbiology,  
and Hygiene of the Ministry of Health Azerbaijan SSSR held in Baku, 25 Apr 56.

SUM: 1360 p. 239

AVNIYAN, L. A., GURINA, N. E.

"Improving the methods of diagnosing the plague." p. 234

Dosyatoye Soveshchanije po parazitologicheskim problemam i prirodnoochagovym boleznyam. 22-29 Oktyabrya 1959 g. (Tenth Conference on Parasitological Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1 25lipp.

Antiplague Inst. of the Caucasus and Transcaucasus/ Stavropol'

AVANYAN, L.A.; GUBINA, N.Ye.

Effect of iron on the growth and virulence of plague microbes.  
Zhur.mikrobiol.epid.i immmun. 32 no.3:92-97 Mr '61. (MIRA 14:6)

1. Iz Nauchno-issledovatel'skogo protivochumnogo instituta Kavkaza  
i Zakavkaz'ya Ministerstva zdravookhraneniya SSSR, Stavropol'.  
(IRON) (PASTEURELLA PESTIS)

AVANYAN, L.A.; GUBINA, N.Ye.; IVANOVA, V.F.

Effect of iron on the virulence and immunogenicity of avirulent strains of Pasteurella pestis. Zhur. mikrobiol. epid. i immun. 40 no.5:17-23 My '63. (MIRA 17:6)

1. Iz nauchno-issledovatel'skogo protivochumnogo instituta Kavkaza i Zakavkaz'ya Ministerstva zdravookhraneniya SSSR, Stavropol'.

AVAR, I.; KURL, E.

Decreasing the size of screw heads. p. 55.  
(Gep., Vol. 9, no. 2, April 1957. Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 9, Sept. 1957. Uncl.

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102520015-5

AVAR, Istvan

Guiding principles of standardization in the field of  
mechanical drawing. Szabvany kozl 14 no.4:87-90 Ap '62.

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102520015-5"

AVAR, Istvan

Introduction of the ISO metric thread system in the Hungarian industry. Szabvany kozl 15 no.9:197-199 S '63.

AVAR, Istvan

Introduction of the International Organization for Standardization metric system in the Hungarian industry.  
Szabvany kozl 15 no. 10:223-225 O '63.

AVAR, Istvan, okleveles gépész mérnök

International terminology of standardization. Szabvány  
közl 16 no. 4:54-56 Ap '64.

1. Hungarian Bureau of Standards, Budapest.

AVAR, L.

"Study on the economic effect of the standard series rating of electric motors." p. 97

SZABVANYUGYI KOZLEMENYEK. (Magyar Szabvanyugyi Hivatal) Budapest, Hungary  
Vol. 7, No. 5/6, May/June 1955.

Monthly List of East European Accessions (EEAI) LC, Vol. 3, No. 6, June 1959  
Uncl.

AVAR, Maria, dr.; SCHOIZ, Magda, dr.

Atypical nevus of the connective tissue. Borgyogy vener. szemle.  
40 no.4;171-175. Ág '64.

1. A IX. ker. Tanacs Mester u. Rendelointezete Rhumaosztalyanak  
es a XIV. ker. Tanacs Uzsoki utcai korhaza Korszovettani  
Osztalyanak kozlemenye.

AVAR, Zoltan, Dr.

Experiences with the Horn operation. Magy. roorv. lap. 21 no.5:281-285  
Oct 58.

1. A Budapesti Orvostudomanyi Egyetem II. sr. Noi Klinikajának közlemenye  
(Igazgató: Zoltan Imre dr. egyetemi tanár).

(PRURITUS, surg.

vulva, Horn's operation (Hun))

(VULVA, dis.

pruritus, surg., Horn's operation (Hun))

AVAR, Zoltan, dr.; GYORVARI, Vilmos, dr.

Data on the problem of prolonged pregnancy. Magy. noorv. lap. no.5:  
272-283 S '61.

1. A Budapesti Orvostudomanyi Egyesem II sz. Női Klinikájának közleménye  
(igazgató: Zoltan Imre dr. egyetemi tanár)

(PREGNANCY)

AVAR, Zoltan, dr.; GYORVARI, Vilmos, dr.

Data on the treatment of prolonged pregnancy. Magy. noorv. lap. 25  
no.2:92-97 Mr '62.

1. A Budapesti Orvostudomanyi Egyetem II sz. Noi Klinikajának kozlemenye  
(Igazgató: Zoltan Imre dr. egyetemi tanár).

(PREGNANCY)

CSILLAG, Miklos, dr.; AVARI, Zoltan, dr.; VATAI, Margit, dr.

Differentiation of adrenocortical from ovarian hypertrichosis and  
virulism. Orv. hetil. 103 no.28:1302-1305 15 Jl '62.

1. Budapesti Orvostudomanyi Egyetem, II. Nogyogyaszati Klinika es XIII.  
ker. Tanacs Robert Karoly koruti korhaza, II. Belosztaly.  
(ADRENOCORTICAL SYNDROME diag) (OVARIES dis)  
(HYPERTRICHOSIS diag)

AVAR, Zoltan, dr.

Our more recent experiences with filling of the uterus with glucose  
using the Kovacs method. Magy. noorv. lap. 26 no.2:72-74 Mr '63.

1. A Budapesti Orvostudomanyi Egyetem II. sz. Nci Klinikajának  
kozleménye (Igazgató: Zoltan Imre dr. egyetemi tanár).  
(ABORTION, THERAPEUTIC) (GLUCOSE)

AVAR, Zoltan,dr.

3 Subsequent tub pregnancies. Crv. hetil. 105 no.51  
2431-2432 20 E '64.

1. Budapesti Orvostudomanyi Egyetem, II. Női Klinika (igazgató:  
Zoltan Imre dr.).

CSILLAG, M.; AVAR, Z.

Significance of the differentiation of female sexual function disorders of various origin in relation to the therapeutic results. *Acta chir. acad. sci. Hung.* 5 no.4:265-272 '64.

1. II. Frauenklinik (Direktor: Prof. Dr. I. Zoltan) der Medizinischen Universität, Budapest.

AVARAM, M.; MAXIM, M.; NENITESCU, C.

Bromoderivatives of 2-phthalimidopropane. p. 239.

Academia Republicii Populare Romane. STUDII SI CERCETARI DE CHIMIE.  
Bucuresti, Romania. Vol. 6, no. 2, 1958.

Monthly List of East European Accessions (EEAI) VOL. 8, no. 7, July 1959.

Unc1.

AVARBE, R. G.

TITLE: Seminar on refractory metals, compounds, and alloys (Kiev, April 1963).  
SOURCE: Atomnaya energiya, v. 15, no. 3, 1963, 266-267.

ACCESSION NR: AP3008085

S. A. Nemponov. Specific features of electron structure and certain properties of 1st, 2nd, and 3rd large-period refractory metals.

G. V. Samsonov, V. N. Paderno. Some laws governing melting temperatures and other physical properties of transition metals.

R. G. Avarbe. Thermodynamic stability of monocarbides of transition metals of subgroups 4, 5, and 6 and periodicity of the change in some of their properties.

V. K. Grigorovich. The relationship between NaCl- and NiAl-type crystal structures of transition metals and their electron structure.

N. M. Yakobi, V. A. Sinel'nikova, and others. Obtaining high-purity vanadium and niobium by electron-beam melting.

N. A. Brilliantov, V. N. Kachinskiy, L. S. Starostina. The growing of molybdenum and tungsten single crystals by zone melting and determination of the Hall effect.

Card 3/11

ACCESSION NR: AP4038443

S/0294/64/002/002/0274/0279

AUTHOR: Vil'k, Yu. N.; Avarbe, R. G.; Neshpor, V. S.; Ryzhkova, T. P.; Omel'chenko, Yu. A.

TITLE: Interaction of niobium carbide with tungsten

SOURCE: Teplofizika vyshokikh temperatur, v. 2, no. 2, 1964, 274-279

TOPIC TAGS: tungsten, niobium carbide, sintered tungsten niobium carbide alloy, tungsten niobium carbide interaction, tungsten niobium carbide alloy, alloy property, alloy microstructure, alloy phase diagram

ABSTRACT: Two sections of the W-Nb-C system, the W-NbC<sub>0.98</sub> with 5—95 wt% W and W-NbC<sub>0.85</sub> with 5—50 wt% W, at 2000, 2600, 2700, and 3000°C, have been investigated by means of metallographic and x-ray phase analyses, visual thermal analysis, and microhardness measurements. The alloys, sintered in a vacuum of 10<sup>-4</sup> mm Hg, contained 0.1 wt% max. of N and O. Heat treatment of the alloys was carried out in an ultrapure

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ACCESSION NR: AP4038443

helium atmosphere. Results of the analyses showed that the W-NbC<sub>0.98</sub> and W-NbC<sub>0.85</sub> sections are not pseudobinary systems and (in the solid state) pass through the two-phase equilibrium regions  $\alpha+\delta$  ( $\alpha$ -W and  $W_2C$  base solid solutions),  $\alpha+\gamma$  ( $\alpha$ -W and NbC base solid solutions), and  $\gamma+\delta$  (NbC and  $Nb_2C$  base solid solutions) and through a three-phase  $\alpha+\delta+\gamma$  region. No ternary compounds were found in that region of the compositions investigated. On the basis of the results obtained, isothermal sections of the ternary phase diagram for 2000, 2600—2700, and 3000°C, and a hypothetic diagram of the W-NbC section were plotted (see Enclosure 1). The W-NbC alloys with less than 20 wt% W were found to be stable at temperatures  $\leq 3000$ °C, but alloys with a higher W content begin to melt at  $\leq 2600$ °C. At 2000°C all alloys are in the solid state and can be used as a base for high-temperature materials. Orig. art. has: 5 figures.

ASSOCIATION: Gosudarstvennyy institut prikladnoy khimii (State Institute of Applied Chemistry)

Card 2/4

ACCESSION NR: AP4038443

SUBMITTED: 21May63 DATE ACQ: 09Jun64 ENCL: 01

SUB CODE: MM NO REF Sov: 007 OTHER: 008

Card 3/4

ACCESSION NR: AP4038443

ENCLOSURE: 01

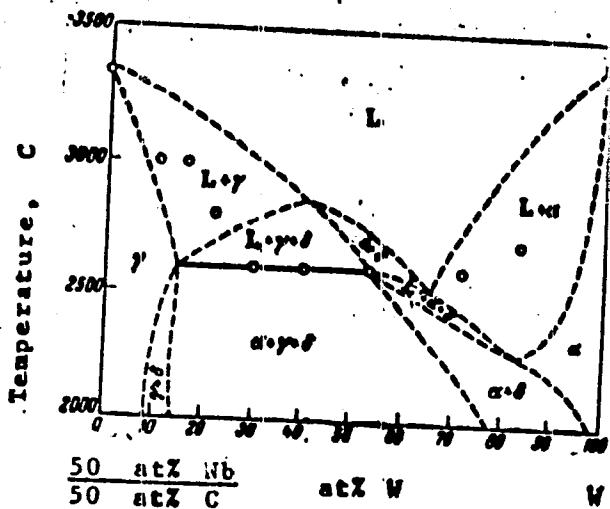


Fig. 1. Hypothetical phase diagram of the W-NbC system

Card 4/4

AVARBE, R.G.; VIL'K, Yu.N.

Calculation of the temperature and concentration dependencies  
of certain thermodynamic functions of the phase NbC<sub>x</sub>. Teplofiz.  
vys. temp. 2 no. 3:406-410 My-Je '64. (MIRA 17:8)

1. Gosudarstvennyy institut prikladnoy khimii.

<u>L 39728-6</u>	EWI (n)	EPF (n)	WRI (n) / KPR	EWI (n) / EPF (n)	16-4 / PU-4	I, P, C
ACCESSION NR.	AP500619	JD/J	G/42/WH	S/0220/63/001/002/0041/0049	38	
AUTHOR:	Averbukh, R. G.				35	R
TITLE:	Thermodynamic stability of monocarbides of the transition metals in the fourth to sixth subgroups					
SOURCE:	Poroshkovaya metallurgiya, no. 2, 1965, 1-49					
TOPIC TAGS:	carbide, metallic compound, transition metal, refractory metal, high temperature material					
ABSTRACT: An attempt is made to establish laws for the change in thermodynamic stability of monocarbide phases of transition metals in the fourth to sixth groups. It is found that the strength of the chemical bond in carbides of the transition metals in these groups increases within the limits of a given group with an increase in the atomic number of the transition metal and diminishes when there is a transition within the period from a carbide of a group four metal to a carbide of a group six metal. Weakening of the M-C chemical bond is accompanied by a reduction in the congruent melting temperature for carbides of group four metals, and by a shift in this temperature to the region of nonstoichiometric compositions						
Card 1/2						

I 39728-65 ACCESSION NR: AP500619		for carbides of group five metals. In this respect, the least stable carbide of vanadium melts with decomposition according to a peritectic reaction. Carbides of group four transition metals as well as tantalum carbide in the moderate temperature range may be considered as compounds of fixed composition, while carbide phases of variable composition based on these metals may be treated as subtractive solid solutions. The abrupt change in partial gram-molecular values in these carbides of stoichiometric composition causes congruent vaporization in a wide temperature range. Vanadium and niobium carbides as well as tantalum carbide preferably lose carbon during vaporization at high temperatures, melt at compositions which differ from stoichiometry, are characterized by a continuous change from partial gram-molecular values, and consequently may be considered as compounds of variable composition.				
ASSOCIATION: Gosudarstvennyy ordena Trudovogo Krasnogo Znameni institut prikladnoy khimii, Leningrad (State "Order of the Red Banner of Labor" Institute of Applied Chemistry)						
SUBMITTED: 2731163		ENCL: 00		SU	CODE: MT, MM	
NO REP SOV: 01		OTHER: 014				
Avg						
Cord 2/2						

NIKOL'SKAYA, T.A.; VIL'K, Yu.N.; AVARBE, R.G.

Variation in the gram-molecular volume during mixing in systems  
zirconium - carbon and niobium - carbon. Porosh. met. 5 no.5:71-  
75 My '65. (MIRA 18:5)

1. Gosudarstvennyy institut prikladnoy khimii, Leningrad.

<u>I 63049-55</u>		<u>EWT(n)/EIP(n)-2/1/EWP(t)/EWP(b)/EW(c)</u>	<u>Pu-4</u>	<u>IJP(t) - JD/MH</u>	
ACCESSION NR.		AP5017/78	UR/0080/65/038/007/1500/1506	546.831+546.831'261+669.018,1	J B
AUTHOR: <u>Vil'k, Yu. N.; Ordan'yan, S. S.; Avarbi, R. G.; Avgustin'ik, A. I.; Ryzhkova, T. P.; Omeichenko, Yu. A.</u>					
TITLE: Phase diagram in the Zr-ZrC system					
SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 7, 1965, 1500-1506					
TOPIC TAGS: zirconium, zirconium carbide, phase diagram, alloy hardness					
ABSTRACT: A phase diagram (see Fig. 1 of the Inclosure) plotted on the basis of measurements of melting points and data of x-ray structural and metallographic studies in the Zr-ZrC system (in the range of 1.25 to 46.25 at. % C) was found to be eutectic in character. The temperature of the eutectic is 1820°C, and the eutectic composition contains 3.0 at. % carbon. The solubility of the latter is about 2 at. % at the temperature of the eutectic transformation. The region of homogeneity of the ZrC phase at the temperature of the eutectic and at 1250°C is bounded by 35 and 39 at. % C, respectively. The lattice constant of alloys located in the two-phase region after soaking at 1100°C is equal to 4.653 kX; the					
Card 1/3					

L 63049-65							
ACCESSION NR:	AP5017778						
extrapolated value of the lattice constant at the upper boundary of the region of homogeneity is equal to 4.688. The microhardness of alloys in the region of homogeneity of the ZrC phase and in the two-phase region is given. In accordance with a hypothesis advanced earlier, the microhardness of alloys may be extrapolated in a straight line to the value of microhardness for pure zirconium at zero carbon content. The solidus line extrapolated to the melting point of zirconium carbide reaches a point between 3375 and 3500°C, which also agrees with the data on the melting point of ZrC. Orig. art. has: 5 figures.							
ASSOCIATION:	None						
SUBMITTED:	23Sep/3			ENCL:	(1)	SUB CODE:	TC, MM
NO REF Sov:	006			OTHER:	008		
Card 2/3							

I 63049-65

ACCESSION NR. AP501779

ENCLOSURE: 01

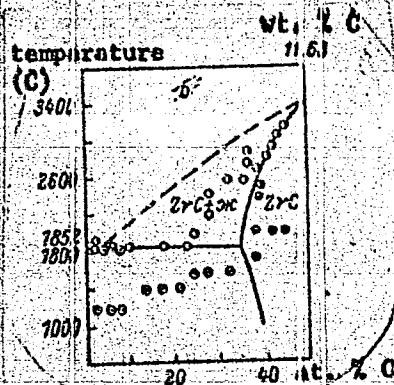


Figure 1. Phase diagram of the Zr - C system.

Card 3/3

I 31876-66 EWT(m)/ETC(f)/EWP(e)/EWP(w)/T/EWP(t)/ETI IJP(c) AT/AWH/GD/HW/JD/JG  
ACC NR: AT6013559 (A) SOURCE CODE: UR/0000/65/000/000/0211/0218

AUTHOR: Vil'k, Yu. N.; Ordan'yan, S. S.; Avarbe, R. G.; Avgustinnik, A. I.;  
Ryzhkova, T. P.; Omel'chenko, Yu. A.

ORG: State "Order of the Red Banner of Labor" Institute of Applied Chemistry (Gosu-  
darstvennyy ordena Trudogo Krasnogo Znamenii institut prokladnoy khimii)

TITLE: Phase diagram of the Zr-ZrC system

SOURCE: AN UkrSSR. Institut problem materialovedeniya. Vysokotemperaturnyye neorgani-  
cheskiye soyedineniya (High temperature inorganic compounds). Kiev, Naukova dumka,  
1965, 211-218

TOPIC TAGS: zirconium, carbide, nonferrous metal, phase diagram, phase composition

ABSTRACT: The phase diagram of the Zr-ZrC system was drawn up on the basis of experi-  
mentally determined melting points, x-ray, and microhardness data for samples contain-  
ing 1.25-46.25 atm % C. The work was conducted in order to resolve a controversy in  
the literature. The phase diagram was examined in the 600°-3100°C range. The samples  
were prepared by fusing zinc hydride with carbon in various ratios and holding for 4  
hrs at 1400°C in argon atmosphere. The phase diagram of the Zr-ZrC system is shown in  
figure 1. The eutectic temperature of the system is 1820°C. The eutectic alloy con-  
tains 3.0 atm % C. The changes of the ZrC-phase lattice parameter as a function of

Card 1/2

L 31876-66

ACC NR: AT6013559

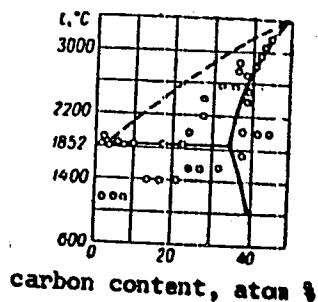


Fig. 1.

composition and temperature are graphed. Changes in microhardness of the Zr-ZrC system as a function of carbon content are also graphed. Orig. art. has: 5 figures.

SUB CODE: 11/

SUBM DATE: 03Jul65/

ORIG REF: 006/

OTH REF: 008

Card 2/2

PB

L 29602-66 ENT(m)/ETC(f)/EMP(e)/EMP(t)/ETI IJP(c) AT/WH/JD/JG/GD  
ACC NR: AT6013560 (A)

SOURCE CODE: UR/0000/65/000/000/0219/0236

AUTHOR: Vil'k, Yu. N.; Avarbe, R. G.; Neshpor, V. S.; Ryzhkova, T. P.; Omel'chenko, Yu. A. <sup>60</sup> <sub>B4</sub>

ORG: State "Order of the Red Banner of Labor" Institute of Applied Chemistry (Gosudarstvennyy ordena trudovogo krasnogo znamenii institut prikladnoy khimii)

TITLE: About interaction between niobium carbide and tungsten

SOURCE: AN UkrSSR. Institut problem materialovedeniya. Vysokotemperaturnyye neorganicheskiye soyedineniya (High temperature inorganic compounds). Kiev, Naukova dumka, 1965, 219-236

TOPIC TAGS: niobium, tungsten, carbide, carbon, nonferrous metal

ABSTRACT: The phase equilibrium of tungsten and niobium carbide, NbC<sub>0.98</sub> (from 5 to 95 wt % W), and NbC<sub>0.85</sub> (from 5 to 50 wt % W), was examined by x-rays in the 2000°-3000°C range. It was found that the system has true two-phase region ( $\alpha+\delta$ -solid solution based on W and W<sub>2</sub>C,  $\alpha+\gamma$ -solid solution based on W and NbC, and  $\gamma+\beta$ -solid solution based on NbC and Nb<sub>2</sub>C) and also a region of a three-phase equilibrium,  $\alpha+\beta+\gamma$ . In the tertiary W-Nb-C region the liquid phase occurs below 2600°C. In the tertiary W-Nb-C region binary eutectic  $\alpha+\beta$ , a tertiary eutectic  $\alpha+\beta+\gamma$ , and a tertiary eutectic  $\alpha+\delta+\gamma$  were detected. The hypothetic profile of the Nb-W-C system is shown in figure 1. The dependence of the lattice parameter of the  $\alpha$ -phase upon Nb content and of the NbC solid solu-

Card 1/3

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102520015-5

L 29602-66

ACC NR: AT6013560

tion upon WC content are graphed. The melting ranges and the possible shape of the polythermal profile of the W-NbC system are also shown. Orig. art. has: 8 figures,  
3 tables.

Card 2/3

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102520015-5"

L 29602-66

ACC NR: AT6013560

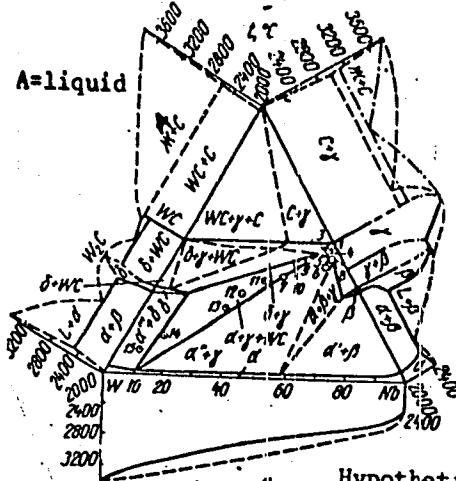
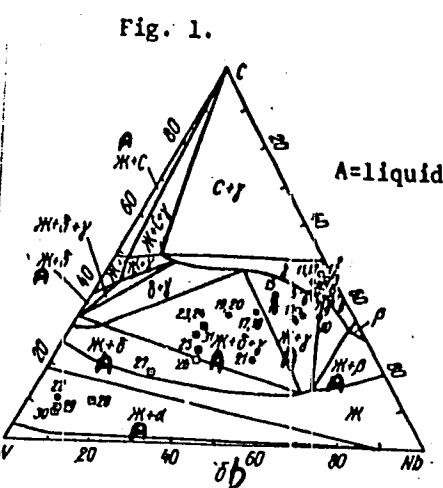
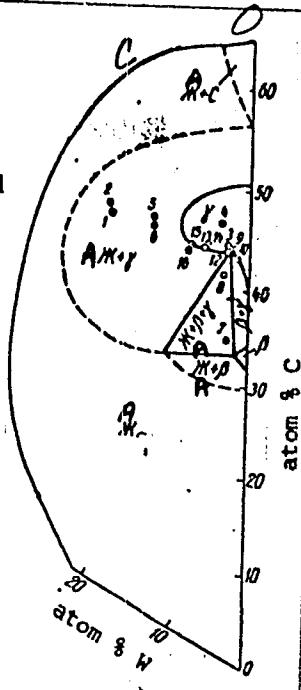


Fig. 1.



Hypothetic profile of the Nv-W-C system  
 at (a)--2000°C; (b)--2600°-2700°C;  
 (c)--3000°C.



SUB CODE: 07/

SUBM DATE: 03Jul65/

ORIG REF: 008/

OTH REF: 010

Card 3/3 CC

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102520015-5

AVARIN, V.

"Struggle "or the Pacific," published by the State Publishers of Political Literature, Leningrad, 1947. 467 pp.

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102520015-5"

AVARIN, V.

Economic conditions and the fight for national liberation in countries of  
Southeastern Asia. Vop.ekon. 5 No. 7. 1952.

SO: MLRA September 1952

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102520015-5

AVARIN, V.

India on the road to economic independence. Vop.ekon.no.1:73..86  
Ja '57. (India--Economic conditions) (MIRA 10:3)

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102520015-5"

AVARIN, V YA ED.

Natsional 'no-osvoboditel 'n nye dvizheniye v  
Latinskoy Amerike na sovremenном etape. Moskva,  
Sotsekgiz, 1961.

297 p.

Half title: Akademiya Nauk SSSR. Institut Mirovoy  
Ekonomiki I Mezhdunarodnykh Otnosheniy.  
Includes bibliographical references.

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102520015-5

AVAN'YEV, V. I.

Teoriia dvizheniiia zhidkostei i gazov v nedeformiruemei poristoi srede [Theory of the motion of liquids and gases in undistorted porous media]. Nauka, Sverdlovsk, 1953.  
616 p.

SO: Monthly List of Russian Publications, Vol 7, No 4, July 1954.

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102520015-5"

POLYAK, A.A.; MARTYSHEVA, G.A.; SOLODOVNIKOV, V.G.; BRAGINA, Ye.A.;  
KONDRAT'YEV, V.A.; UL'RIKH, O.D.; ZABLOTSAYA, A.I.;  
SAVEL'YEV, N.A.; POKATAYEVA, T.S.; AVARIN, V.Ya., otv.red.;  
PANTELEYEV, V.I., red.izd-va; ASTAF'YEVA, G.A., tekhn.red.

[Industrialization problems of the sovereign underdeveloped  
countries of Asia (India, Indonesia and Burma)] Problemy in-  
dustrializatsii suverennykh slaborazvitykh stran Azii (Indiya,  
Indoneziya, Birma). Moskva, Izd-vo Akad.nauk SSSR, 1960.  
436 p.

(MIRA 14:2)

1. Akademiya nauk SSSR. Institut mirovoy ekonomiki i mezhdu-  
narodnykh otnosheniy. 2. Sektor stran Yugo-Vostochnoy Azii  
i Dal'nego Vostoka Instituta mirovoy ekonomiki i mezhdu-  
narodnykh otnosheniy Akademii nauk SSSR (for all except Avarin,  
Panteleyev, Astaf'yeva).

(Asia, Southeastern--Industrialization)

FARIZOV, I.O.; MEDOVYI, A.I.; MAKSIMOV, M.A.; MASLOV, A.A.; MUSSO, S.;  
BOGDANCHIKOV, M.M.; VARENTSOV, K.M.; AVARIN, V.Ya., otv. red.;  
POLYAK, A.A., otv. red.; TRINICH, F.A., red. izd-va; VOLKOVA,  
V.V., tekhn. red.

[Agrarian-peasant question in the independent underdeveloped  
countries of Asia; India, Burma, Indonesia] Agrarno-krest'ianakii  
vopros v suverennykh slaborazvitykh stranakh Azii; India, Birma,  
Indoneziia. Moskva, 1961. 353 p. (MIRA 14:6)

1. Akademiya nauk SSSR. Institut mirovoy ekonomiki i mezhd narodnykh  
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GRECHEV, M.A., kand. ekon. nauk; KLESMET, O.G., kand.ekon. nauk; TARASOV, K.S., kand. ekon. nauk; DANILEVICH, M.V., doktor ekon. nauk; YURLOV, A.F., kand.ekon. nauk; ONUFRIYEV, Yu.G.; ROMANOVA, Z.I., kand. ekon. nauk; SHEREMET'YEV, I.K., kand. ekon. nauk; SHUL'GOVSKIY, A.F., kand. istor. nauk; KALININ, A.I., kand. iurid. nauk; AVARINA, V.Ya., doktor ekon. nauk, red.; BAYKOV, V.S.,red.; KOVALEV, A.P., red.izd-va; KASHINA, P.S., tekhn. red.

[Economic problems of Latin American countries] Ekonomicheskie problemy stran Latinskoi Ameriki. Moskva, Izd-vo AN SSSR, 1963. 511 p. (MIRA 17:1)

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"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102520015-5

AVARSIN, Ya.D.; KONOLIK, A.Ya.; MINDLIN, Ya. I.; DROGAL'VA, I.V.; PRIGORINA,  
A.I.; prinimali uchastye: MARINKOVA, V.P., tekhnik; REVINA, M.A.,  
tekhnik; MARTYNNIKINA, L.Y., inzh.

Effect of chemical treatment of a glass fiber surface on the properties  
of fiber glass reinforced plastics. Plast.massy no.7:31-35 '60.

(Glass reinforced plastics)

(MIRA 13:10)

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102520015-5"

MOVSIKYANTS, A.P. Prinimali uchastiye: BEGUCHEV, A.P.; IVANOV, A.D.; KARNAUKHOVA, Ye.I.; MIKOLAYEVSKAYA, O.M.; NOSKOV, B.G.; PUTILOV, A.K. AVARSKIY, A.I., red.; PEVZNER, V.I., tekhn.red.; TRUKHINA, O.N., tekhn.red.

[Brief manual on cattle raising] Kratkii spravochnik po krupnomu rogatomu skotu. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 327 p.  
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(Cattle)

KIIK, H.; AVARSOO, H., red.; VEBER, T., tekhn. red.

[Years of growth of the "Vanguard" collective farms] "Avangardi"  
kolhoosi tõusuaastad. Tallinn, Eesti Riiklik Kirjastus, 1960. 61 p.  
[In Estonian] (MIRA 14:12)  
(Tartu District—Collective farms)

TOOTSEN, U.; AVARSOO, H., red.; LAUL, U., tekhn., red.

[Utilization of inland waters] Siseveekogude majandamisest.  
Tallinn, Eesti Riiklik Kirjastus, 1960. 146 p. [In Estonian]  
(MIRA 15:1)  
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AVARSOO, H., red.; LIIVAND, T., tekhn. red.

[For the young poultry breeder] Noorele linnukasvatajale.  
Tallinn, Eesti riiklik kirjastus, 1961. 59 p.

(MIRA 15:5)

1. Eestimaa Leninlik Kommunistlik Noorsooühing. Keskkomitee.  
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tekhn. red.

[Organization of veterinary medicine] Veterinaarorganisatsioon.  
Tallinn, Eesti riiklik kirjastus, 1961. 247 p. (MIRA 15:5)  
(Veterinary medicine)

AAVER, E., kand. ved. nauk; AVARSOO, H., red.; MEDARI, J., tekhn. red.

[Viruses] Viirused. Tallinn, Eesti Riiklik Kirjastus, 1961.  
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[The Estonian large white swine breed and its productivity]  
Eesti suure valge seatõu jäödlusest ja arengust. Tallinn,  
Eesti Riiklik Kirjastus, 1962. 171 p. (MIRA 17:1)  
(Estonia—Swine breeds)

HÖIM, H.; AVARSOO, H., red.; LIIVAND, T., tekhn. red.

[Laboratory manual of animal husbandry] Loomakasvatuse  
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1962. 231 p. (MIRA 17:1)

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[Experience in lowering the production costs of milk]  
Piima omahinna alandamise kogemusi. Tallinn, Eesti  
Riiklik Kirjastus, 1963. 52 p. (MIRA 16:12)  
(Dairying---Costs)

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SEPP, V., kand. veter. nauk, st. uchitel"; AVARSÖO, H.,  
red.; KOHÜ, H., tekhn. red.

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[Quality and marketing costs of livestock produce]  
Loomakesavatus saaduste kvaliteet ja realiseerimis  
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[Hydrological yearbook] Gidrologicheskii ezhegodnik. Lenin-  
grad, Gidrometeoizdat. 1959. Vol.5. [Basins of the rivers of  
Central Asia] Basseiny rek Srednei Azii, Nos. 0-4, 9. [Basins  
of the Aral Sea, lake Issyk-Kul' and the Caspian Sea] Basseiny  
Aral'skogo moria, oz. Issyk-Kul' i Kaspiiskogo moria, Pod red.  
A.I.Avariaskina. 1962. 398 p. (MIRA 16:5)  
(Hydrology--Tables, calculations, etc.)

AVARYASKIN, A.I.

Daily variations of water level in the high water period  
in the rivers of Uzbekistan. Trudy Sred.-Az. nauch.-issl.  
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AVASI, B.

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SO: Monthly List of East European Accession (EEAL) LC. Vol. 6 no. 7, July 1957, Uncl.

AVASI, B.

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SO: Monthly List of East European Accession (ERAL) LC. Vol. 6 no. 7, July 1957, Uncl.

AVACI, B.

100 magyaroszagi nemzetiségi nendal (100 Folk Songs of National Minorities in Hungary);  
a book review. p. 186 (Ethnographia Vol. 67, no 1/2, 1956 Budapest)

SO: Monthly List of East European Accession (EWAL) LC. Vol. 6 no. 7, July 1957, Uncl.

AVASI, B.

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SC: Monthly List of East European Accession (EEAL) I.C. Vol. 6 no. 7, July 1957, Uncl.

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102520015-5

MOCANU, Octavian, corespondent; AVASILOAIE, Filaret, economist;  
TELEMAC, S., corespondent

News, Constr Buc 16 no.776:1 21 N '64.

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102520015-5"

AVASTE, O. A.

PHASE I BOOK EXPLOITATION

SOV/4466

Akademiya nauk Estonskoy SSR. Institut fiziki i astronomii

Issledovaniya po fizike atmosfery, Vyp. 1 (Research on Atmospheric Physics,  
No. 1) Tartu, 1959. 107 p. 800 copies printed. [In Russian and English.]

Editorial Board: J. Ross (Chairman), O.Avaste, Kh. Liydemaa, and H. Murk;  
Ed.: Kh. Niyorsk.

PURPOSE: This publication is intended for geophysicists, meteorologists, and  
astronomers.

COVERAGE: This is the first issue of a new serial publication put out by the  
Sektor fiziki atmosfery Instituta fiziki i astronomii AN Estonskoy SSR (Sector  
of Atmospheric Physics of the Institute of Physics and Astronomy of the Academy  
of Sciences Estonskaya SSR) on research in the physics of the atmosphere. The  
publication is to appear at irregular intervals (1 - 2 issues per year) and will,  
for the most part, contain papers in actinometry. Issue 1 contains articles  
dealing with radiation intensity and the characteristics of atmospheric trans-  
parency, spectral reflectivity of vegetation covers, and a discussion of

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Makhotkin's index of turbidity. No personalities are mentioned. An English summary follows each article. References accompany each article.

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The author thanks Yu. Ross.

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